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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/647,332	08/26/2003	Kentaro Tomioka	04329.3119	3534

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EXAMINER

PAPE, ZACHARY

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 06/14/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/647,332

Applicant(s)

TOMIOKA ET AL.

Examiner

Zachary M. Pape

Art Unit

2835

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 May 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9-22 is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☒ Claim(s) 3-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 May 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 11/12/2004, 8/26/03
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakagawa et al. (US 6,519,148) in view of Whiting (US 2,477,533). With respect to claim 1, Nakagawa et al. teaches an electronic apparatus comprising: a housing (Comprising 1, and 2) having a heat-generating component (4); a circulating path (Illustrated by tube 12) through which liquid coolant for cooling the heat-generating component flows (Column 4, Line 45). Nakagawa et al. fails to teach that the circulating path has a first connecting end and a second connecting end connected to the first connecting end, and a coolant-absorbent member provided to a junction between the first connecting end and the second connecting end. Whiting teaches the use of first connecting end (25) and a second connecting end (14) connected to the first connecting end (As illustrated in Fig 1) with a coolant-absorbent member (12, the gasket by nature will absorb at least a little coolant) provided to a junction between the first connecting end and the second connecting end. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the connecting and coolant-absorbent means of Whiting with the housing and circulation path of Nakagawa et al. to provide a superior connecting means between two connecting ends by providing a joint

which compensates automatically for misalignment of the mating pipe sections (Whiting, Column 1, Lines 29-45).

With respect to claim 2, Nakagawa et al. further teaches that the circulating path includes a heat-receiving portion (10) which receives heat from the heat-generating component (4), a heat-radiating portion (2) which radiates the heat of the heat-generating component (Column 4, Lines 25-26), and a pump (11) which circulates the liquid coolant between the heat-receiving portion and the heat-radiating portion.

***Allowable Subject Matter***

2. Claims 9-22 are allowed.

The following is an examiner's statement of reasons for allowance:

The allowability resides in the overall structure of the device as recited in independent claims 9, 17, and 21 and at least in part because claims 9, 17, and 21 recite: "a detecting member which detects whether the member is absorbing the liquid coolant".

The aforementioned limitations in combination with all remaining limitations of claims 9, 17, and 21 are believed to render said claims 9, 17, and 21 and all claims dependent therefrom patentable over the art of record.

Claims 3-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

The allowability resides in the overall structure of the device as recited in dependent claim 3 and at least in part because claim 3 recites, "and in which the second connecting end is interposed between the first connecting end and the outer wall, and the member is interposed between the second connecting end and the outer wall". The Whiting reference clearly teaches the limitations in claims 1 and 2, and further teaches an outer wall (11) surrounding the first connecting end (25) but fails to teach that the second connecting end (14) is interposed between the first connecting end (25) and the outer wall (11).

The aforementioned limitations in combination with all remaining limitations of claim 3 are believed to render said claim 3 and all claims dependent therefrom patentable over the art of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

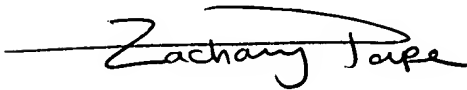
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary M. Pape whose telephone number is 571-272-

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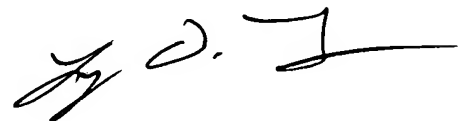
2201. The examiner can normally be reached on Mon. - Thur. & every other Fri.  
(8:00am - 5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynn Feild can be reached at 571-272-2092. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ZMP



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